



MERRIMACK FIRE RESCUE

EMERGENCY MANAGEMENT

432 Daniel Webster Highway
Merrimack New Hampshire 03054
603.424.3690 ♣ Fax 603.424.0603

Fire Chief
Michael P. Currier

Assistant Fire Chief
Anthony D. Stowers

Assistant Fire Chief
Richard W. Pierson

MEMO

ELECTRICAL SAFETY ISSUES FOR GENERATOR INSTALLATIONS

Several violations of the National Electrical Code appear to be prevalent when generators are installed without benefit of inspection, or by unqualified people. The most frequently observed are:

- 400.8 Flexible Cords And Cables, Uses Not Permitted
 - (1) As a substitute for the fixed wiring of a structure.
 - (2) Where run through holes in walls, structural ceilings, suspended ceilings, dropped ceilings, or floors.
 - (3) Where run through doorways, windows, or similar openings.
- 406.7 Receptacles, Cord Connectors, And Attachment Plugs (Caps), Connection of Attachment Plugs
 - (B) Attachment plugs shall be installed so that their prongs, blades, or pins are not energized unless inserted into an energized receptacle or cord connectors. No receptacle shall be installed so as to required the insertion of an energized attachment plug as its source of supply.
- 408.36 Switchboards And Panelboards, Overcurrent Protection
 - (C) Back-Fed Devices. Plug-in-type overcurrent protection devices or plug-in type main lug assemblies that are backfed and used to terminated field-installed ungrounded supply conductors shall be secured in place by an additional fastener that requires other than a pull to release the device from the mounting means on the panel.
- 110.3 Examination, Identification, Installation, and Use of Equipment. Installation and Use
 - (B) Listed or labeled equipment shall be installed and used in accordance with any instructions included in the listing or labeling.

Most problems arise from misinformation concerning the feasibility of different connections from a generator to an electrical system. The most common attachment is utilization of a double ended cord cap from source to a dryer outlet, or some other available receptacle outlet. All of the indicated codes herein apply to violations created by that installation.

The danger of electrocution to line persons working on wires in the vicinity of such a set up is extremely high, as is the capacity to introduce electrical power that can be realized at other premises close by.

Connections to any electrical power system in any form should be accomplished by qualified persons, permitted, and inspected, to insure a safe and proper installation.

Electricity is not a hobby.

Fred T. Kelley
Building Official
Merrimack NH